

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) Process for directly producing a blend of water soluble cellulose ~~sulfoacetate~~ sulfoacetates ~~derivatives~~ through esterification of a cellulose ~~material~~, comprising the steps of:

(i) suspending the cellulose ~~material~~ in a solution containing glacial acetic acid and eliminating the excess acetic acid,

(ii) suspending the cellulose ~~material~~ swollen with acetic acid from step (i) in a mixture of sulphuric acid solution and glacial acetic acid, and

(iii) reacting the cellulose ~~material~~ by adding the acetic anhydride, characterized in that:

- the acetic anhydride quantity ~~ranges from 3 to 7~~ is about 3.2 mols/mol of anhydroglucose
- the esterification time ranges from 1 to 60 mn, and
- the esterification temperature ranges ~~from 25 to 80°C~~ about 40°C.

2. (currently amended) Process according to claim 1, characterized in that it comprises a step (iv) ~~during~~ in which the reaction of step (iii) is stopped by adding an aqueous solution of acetic acid.

3. (currently amended) Process according to claim 2, characterized in that it comprises the steps of:

~~(v) adding water in order to precipitate the optionally~~  
~~generated~~ any cellulose triacetates that are generated,

(vi) centrifuging, recovering the supernatant and eliminating the residue,

(vii) neutralizing the supernatant,

(viii) dialyzing the resulting precipitate, and

(ix) freeze-drying the solution.

4. (cancelled).

5. (Cancelled).

6. (previously presented) Process according to claim 3, characterized in that the step (vii), is carried out by a slow addition of a sodium hydroxide solution until a pH of about 7.5 is reached.

7. (previously presented) Process according to claim 3, characterized in that at the step (vii) the blend is cooled in an

ice bath and the pH is continuously monitored so that the pH does not exceed 10.

8. (previously presented) Process according to claim 7, characterized in that the pH does not exceed 7.5.

9. (Cancelled).

10. (currently amended) Process according to claim 1, characterized in that the ~~chosen~~ esterification time ranges from 20 to 30 mn.

11. (cancelled).

12. (currently amended) Process according to claim 1, characterized in that the starting cellulose ~~material~~ is cellulose residues purified from ~~co-products~~ products derived from agriculture.

13. (currently amended) Blend of hydrosoluble cellulose ~~sulfoacetate~~ sulfoacetates ~~derivatives~~ obtained by performing a process according to claim 1, characterized in that said ~~derivatives~~ sulfoacetates have an acetylation degree ranging from 1.5 to 2.4.

14. (previously presented) Derivative blend according to claim 13, characterized in that said derivatives have a sulphation degree ranging from 0.2 to 0.6.

15. (original) Derivative blend according to claim 14, characterized in that said derivatives have a sulphation degree of 0.3.

16. (previously presented) Derivative blend according to claim 13, characterized in that only the carbon atom which is in position 6 of the anhydroglucose is sulphated.

17. (previously presented) Derivative blend according to claim 13, characterized in that said derivatives have a viscosimetric mean polymerization degree determined in cupric ethylene diamine at 25°C ranging from 210 to 1590.

18. (previously presented) Derivative blend according to claim 15, characterized in that said blend intrinsic viscosity, determined by extrapolation at nil concentration of the reduced viscosity measured in water at 25°C ranges from 600 to 1500ml/g.

19. (Cancelled).

20. (previously presented) Blend according to claim 13, characterized in that it is free from triacetylated derivatives.

21. (previously presented) Blend according to claim 13, characterized in that said derivatives are thermally stable for 16 hours at 80°C.

22. (previously presented) Blend according to claim 13, characterized in that it has the form of a thermoreversible and partially thixotropic gel.

23. (previously presented) The process according to claim 3, wherein said process further comprises, before step (v), the following steps:

(a) centrifuging the blend obtained in step (iv), and recovering the centrifugation supernatant; and

(b) washing the residue obtained from centrifugation in step (a) with acetic acid, then with water, and then adding the acetic acid and the water resulting from the washing steps to the supernatant which was recovered in step (a).

24. (currently amended) The process of claim 12, wherein the starting cellulose ~~material~~ consists of cellulose residues purified from ~~co-products~~ products derived from cereal bran selected from the group consisting of wheat and corn.

25. (currently amended) The process of claim 12, wherein the starting cellulose ~~material~~ consists of cellulose

residues purified from ~~co-products~~ products derived from wood  
cellulose selected from the group consisting of pine-tree  
cellulose and microcrystalline cellulose.